test was, like that of the carload shipped to the Oldham mill, *coarse* enough to be easily saved by stamp mill work.

Meantime assays of lots sent to Mr. A. F. Browne, of Boston, had shown values ranging from $3.72 to $4.18, but the gold obtained in these laboratory tests was, according to Mr. Browne, *very fine.*

Here were discrepancies. Stamp mill tests on 100 tons showed *coarse* gold, stamp mill tests on 93 tons showed *absolutely no recognizable gold*, assay and laboratory tests on one ton showed *very fine gold.*

The explanation offered for finding no gold in the two lots of 50 and 43 tons milled by stamps, of organic matter in the water, and of "chemicals" used, might possibly be taken into account if the gold really was *very fine*, but when gold is coarse enough to be easily saved in the mortar, such an "explanation" fails to explain.

That these variations and discrepancies should have made the officials of the company dubious, and have induced caution, goes without saying, but apparently quite the contrary impression was produced, for on the 15th September, after a somewhat discordant meeting, Mr. Neilly and his directors got a vote deeming the erection of the remaining 40 stamps expedient and advisable, and work thereon was at once commenced. This was the beginning of the end. No competent expert, on such conflicting testimony as the company possessed, would have advised such action, yet this company with a paper capital of $400,000 proceeded to equip the property with a large plant, while yet utterly ignorant of the extent or real average value of the deposit they imagined they possessed. No portion of the 370 acres of territory owned was opened or tested beyond the old face of the ballast pit, and the yields from that were discordant, so that absolutely no calculations as to quality, or uniformity, or continuity were possible.

The mill erected was built in a slip-shod and cheap manner; no provisions for heating were made, and the power arrangements were so imperfect that the 50 heads were never able to run continuously for any length of time. Yet for this mill Mr. Neilly is said to have received from his company the sum of $25,000—a larger sum than was paid by the Coldstream Company for the same mill when new, and for which, when they sold to Mr. Neilly, they received only the sum of about $5,000. The profit to this gentleman is variously named at from $10,000 to $15,000.

Late in October, when the 50 stamp mill was under way, a man who describes himself and his business as "a cutter of ladies' coats and jackets," talks "patent electric process," "mercurial hydrate of sodium," and a lot of other senseless jargon to Mr. Neilly to such effect that that gentleman orders several car loads of conglomerate sent to this ladies' coat-cutter to be tested. Who is surprised to find this jacket-maker gets a higher yield per ton than the stamp mill tests gave? His "patented mercurial hydrate of sodium made by electricity," apparently manufactured gold. But who is *not* surprised to find the president of a mining company, with large property and large capital, so credulous and so ignorant as to be induced to make another "proposition" to his company (as a contractor or what you like, to put in one of these wonderful patent mills and to take his pay therefor in "*excess profits*," whatever they may be, and at a substantial advance upon the cost of the machine!

Truly a wonderfully pliable, credulous and most lamentably unbusiness-like "company." But from letters in the daily press of Halifax, President Neilly was afraid to have the resulting bullion from this wonderful mill tested for fineness; he preferred to treat the gross yield as fine gold because he was going to use the results of this patent process "to sell stock."

Shortly after comes the end. The mill being so imperfect cannot run in winter weather, at which time it is finished, "inspected and accepted," and paid for. Sometime in June of this year, under the guidance of an amalgamator who has no superior in stamp mill work in Nova Scotia, the big mill finally makes a start, dropping on an average between 20 and 30 head. Over 1,000 tons are milled; results: *both in patent electric mercurially-hydrated-personally-ladies'-coat-cutter-conducted-machine*, and in the stamp mill—*nil*—or next to nothing, the magnificent sum of 3 cents per ton being realized.

The bubble has burst, bills remain unpaid for some time, and President Neilly makes an "explanation" which reads very cleverly, but doesn't "explain."

The plain obvious moral is: Don't trust a so-called business man to run a mining scheme unless he has competent expert advice from the beginning. As the Halifax *Critic* so well said in its issue of the 3rd August: "All mine investors cannot be mining experts, but before plunging their money into a venture they should avail themselves of the advice and experience of some professional man who could save them from some financial foolishness of which they might afterwards be ashamed. * * * We can only say 'you have yourselves to blame.'"

We do not hesitate, in our opinion, to say that the gentlemen who acted as provisional directors of this Memramcook Co., are in a great measure responsible, as they took no steps to ascertain the truth or falsehood of the statements incorporated in the prospectus by competent expert mining advice. It is well known that some of the Geological Survey staff, when visiting that district, found nothing to warrant the extravagant claims made; it is also well known that no engineer of reputation ever visited the property or reported on the same. It is *surmised* that Mr. J. B. Neilly is the only individual who has profited by the deal. Who, we ask, are responsible for this state of affairs but the directors? the body of men elected by the shareholders to conserve and forward their interests!

And that such work should be held up as characteristic of Nova Scotian methods in the gold mining business is a slander and libel upon an industry which is legitimate, growing and straightforward in its characteristics.

Copper Mining in Cape Breton.

Hitherto the name of Cape Breton has been synonymous with coal. In fact few people believe that there is anything else in Cape Breton except some lakes, coal mines and enough dry ground for the miners' houses to stand on. A smile often meets the assertion that Cape Breton has a fishing and farming industry either of which is quite as important as coal mining. The number of those who believe that in metal mining there exists in this island the foundation of an industry vastly more important than all the others combined, is confined to those who view the island with experience gained in other countries. The concentration of so much capital upon the coal mines, the facility with which they can be opened, the indifferent and easily procurable skill that can readily mine coal, all have combined to withdraw attention from the more complex productions of the metallurgist's skill. So much has this been the case in Cape Breton that it is hardly known that the island is one of the most promising mineral fields of Canada.

The labors of the staff of the Canadian Geological Survey, have given us a map showing the Laurentian, Silurian, and Carboniferous districts, but as yet the metal prospector and the mineralogist have seen little of Cape Breton. The list of minerals as yet known comprise iron, copper, lead, silver, graphite, manganese, mica, feldspar, asbestos, barytes, fluor spar, strontianite, phosphates, marble, gypsum, building stones, fireclay, etc.

In the development of the gypsum and marble initiatory steps have been taken with fair promise of expansion. The future, however, so far as it relates to the material prosperity and the accumulation of capital in Cape Breton, depends on the utilisation of her coal in the varied and complex methods of the metallurgist, who smelts her ores and produces lead, copper, iron, steel, etc. The mere export of coal, practically a raw material, leaves in the country little beyond the wages paid for its extraction and shipment, in other words the equivalent of the support of the laborer. Take England as a shining example of this. Large as her